ABSTRACT

A method to demolish concrete that comprises electrically connecting rebar disposed within the concrete to a power supply, electrically connecting a counter electrode within electro-osmotic communication of the concrete to a power supply, and externally providing electrolyte as supplemental moisture for the concrete. An electric field is created within the concrete and causes water moisture to migrate toward the rebar thereby expediting the corrosion thereof. The corrosion of the rebar generates iron oxides, which because of their greater volume, cause areas of localized pressure within the concrete. As the corrosion process proceeds, an accumulation of oxides increases the localized pressure to cause cracking within the concrete.